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ABSTRACT

Although there is literature on Acquired Immune Deficiency Syndrome (AIDS), empirical research on family, social, and individual factors that may influence the psychological distress experienced by AIDS, Aids-Related Complex (ARC), Human Immunodeficiency Virus positive (HIV+) and worried well individuals is limited. This study explored the importance of family variables, social support, and homophobia regarding their influence on the psychological distress experienced by homosexual/bisexual men at varying levels of risk for AIDS. The 162 subjects were divided into the following groups: 60 HIV spectrum disorder (including persons with AIDS, ARC, and HIV+), 61 untested, and 41 tested negative. All subjects were homosexual or bisexual men who volunteered for the study. Subjects completed the Symptom Checklist-90 Revised, the Nungesser Homosexual Attitudes Inventory, the Perceived Social Support from Friends and Family scales, and the Family of Origin Scale. Results indicated that the HIV spectrum disorder group experienced significantly greater psychological distress than the untested or test negative groups. Self-perceived levels of health relative to family of origin experiences were below average for all groups, social support from friends was significantly greater than that reported for family, and level of internalized homophobia was significantly greater for the test negative groups only. (Implications for counselors working with homosexual and bisexual men are provided. Eight pages of references and 37 tables of data are included.) (Author/NB)

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# The Spectrum Disorders: An Exploratory Study of Family, Social, Individual and Psychological Distress Dimensions

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Running head: Spectrum Disorders

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Abstract

Although there is a sizeable and growing literature on AIDS and AIDS-related diagnosis, empirical research on family, social, and individual factors that may influence the psychological distress experienced by AIDS, ARC, HIV+, and worried well individuals is limited. The present study expands on previous research by exploring the importance of family variables, social support and homophobia regarding their influence on the psychological distress experienced by gay/bisexual men at varying levels of risk for AIDS. Results indicated that the HIV spectrum disorder group experienced significantly greater psychological distress than the untested or test negative groups. Implications for counselors working with gay/bisexual men are provided.

## The Spectrum Disorders: An Exploratory Study of Family, Social, Individual and Psychological Distress Dimensions

Although there is a sizable and growing literature on the relationship between psychological stress and illness (Dohrenwend & Dohrenwend, 1978; Cohen & Weisman, 1986; Kobasa, 1979; Thoits, 1986), studies examining the relationship between psychological stress and immune related illness are a recent event (Kiecolt-Glaser & Glaser, 1988). Studies examining the relationship between psychological distress and the progression of the HIV spectrum disorders are also in their infancy stage (Kiecolt-Glaser & Glaser, 1987). For example, research on persons diagnosed with an HIV spectrum disorder suggest that psychological distress is persistent and severe (Kelly & St. Lawrence, 1988) and that individuals with AIDS or ARC report elevated levels of anxiety, fear, depression, withdrawal, anger, and alienation (Cohen & Weisman, 1986; Dilley et al., 1985; Flaskerud, 1987; Nichols, 1985). Kelly and St. Lawrence (1988) also report that levels of psychological stress may vary due to the alternating periods of acute illness and better health.

Further, psychosocial or behavioral variables are co-factors that may influence HIV infection and disease progression (Morin, 1988; Morin, Charles, & Malyon, 1984). Those variables cited most often in the literature are separation or divorce (Carl, 1986; Gumaer, 1987), bereavement (Irwin, Daniels, Smith, Bloom, & Weiner, 1987), and marital quality

(Backer, Batchelor, Jones, & Mays, 1988; Barrows & Halgin, 1988; (Levenson, 1988; Kiecolt-Glaser, Fisher et al., 1987). These data suggest that major disruptions in interpersonal relationships can affect immune functioning.

In addition, a review of the literature suggests that psychological distress among AIDS populations may contain a differential component. For example, hemophiliacs with AIDS appear to experience relatively lower levels of acute emotional distress than have been reported for gay men with AIDS (Moulton, Sweet, Temoshak, & Mandel, 1987). Moynihan, Christ, and Silver (1988) also report differential levels of distress among persons who are experiencing a spectrum disorder. Persons with ARC report higher average levels of emotional distress than persons with full blown AIDS (Joseph, Montgomery, et al., 1987). Persons with ARC have greater levels of depression, hostility, and somatization, and Tross and Holland (1986) suggest that these emotional reactions may be associated with the uncertainty and anxiety surrounding the ARC diagnosis.

Other variables that appear to influence how an individual experiences distress and/or related health outcomes are social and family support. For homosexuals, intimate support systems are important variables in terms of adjustment (Ross, Paulsen, Stablstrom, & MSocSci, 1988), and the rapid increase of gay peer social networks since the onset of the AIDS epidemic is explained in terms of a greater need for emotional support to deal with AIDS-related stressors (Stulberg & Smith, 1988). Research suggests that involvement in support programs and

organizations has been found to predict better coping (Kelly & St. Lawrence, 1988; Zich & Temoshok, 1987). In a preliminary study using interviews with significant others, Greif and Porembski (1988) reported that support groups were noted as being helpful by all who participated.

In a similar fashion, family influence has emerged as an important variable affecting adjustment to AIDS and ARC (Stulberg & Buckingham, 1988). For many gay men, the AIDS crisis can add new complications to already stressed family situations (Geis et al., 1986; Keller & Rosen, 1988). In one study, families reported a conflict between their love for the family member with AIDS and feelings of confusion and humiliation, with resulting homophobia and guilt (Deuchar, 1984). In other cases, diagnosis may precipitate the disclosure of one's sexual identity to family of origin with resulting stigma and major disruptions in familial relationships and financial resources (Bechtel, 1987; Flaskerud, 1987; Kelly & St. Lawrence, 1988; McDonald, 1982; Schlessinger, 1983). Rolland (1987) provides an excellent conceptual framework for thinking about the transgenerational aspects of illness, loss, and crisis which appears especially pertinent to the AIDS population. Britton and Zarski (in press) look more specifically at the impact of spectrum disorders on the coping style of families.

In summary, the literature reflects the significance of current distress and crisis in the care of AIDS patients (Bor et al., 1988; Dilley, Ochitill, Perl, & Volberding, 1985;

Flaskerud, 1987; Levenson, 1988; Nichols, 1985; Price, Omizo, & Hamett, 1986) and identifies its impact on intimate systems, both familial and peer (Geis, Ruller, & Rush, 1986; Greif & Porembski, 1988; Martin, 1988; Stulberg & Buckingham, 1988). Likewise, the literature reveals that many psychosocial issues interface with AIDS and ARC (Kaplan, Johnson, Bailey, & Simon, 1987; Kelly & St. Lawrence, 1988). In particular, social support, both family and peer, has surfaced as an important variable mediating psychological stress (Maloney, 1988; Zich & Temoshok, 1987). Research is needed to identify family, individual, and social factors that can influence the distress experienced by AIDS, ARC, HIV+, and worried well individuals so that more specific interventive strategies might be developed (Kaplan et al., 1987).

The present study attempts to contribute to the empirical research previously reported in the following ways. First, one aim was to clarify further the body of evidence that psychological distress among individuals at varying levels of risk for AIDS contains a differential component. Although previous studies suggest that levels of psychological distress may vary with type of diagnosis, the findings are limited to HIV spectrum disorders and comparisons with test negative or untested individuals are not reported. The present study expands upon previous research by focusing on a group of gay and bisexual men which includes individuals with AIDS, ARC, and HIV+ diagnoses, in addition to individuals who have tested negative and those who are at risk but untested.

A second goal was to explore the role of other variables frequently mentioned in the literature; specifically, homophobia, social support, and early family experiences, regarding their influence on the psychological distress experienced by individuals at varying levels of risk for AIDS. While previous research has documented the importance of social support in dealing with AIDS-related stressors, there has been a paucity of empirical research data regarding the importance of homophobia or family variables. The present study is an exploratory effort to examine the impact of homophobia, early family experiences, and family support on the level of psychological distress experienced by gay men at varying levels of risk for AIDS.

## Method

### Subjects

The participants for this study were obtained through the Cleveland Health Issues Task Force, a volunteer organization providing umbrella services to those with AIDS, ARC, and HIV positive conditions. Additional sampling was done through physicians, testing centers, and community task forces throughout the Midwest. Overall, there were 162 subjects, subdivided into the following groups: 60 HIV spectrum disorder (including persons with AIDS, ARC, and HIV positive), 61 untested, and 41 tested negative. Consistent with the recommendations of several researchers (Joseph, Emmons, et al., 1984; Moynihan, Christ, & Silver, 1988), the AIDS, ARC, and HIV+ individuals were combined in an HIV spectrum group with an N of 60. All

subjects were gay or bisexual men, and were volunteers for the study. The mean age was 35 years, with a range of 23 to 45 years. The participants were mainly white, with at least a high school education.

Procedure

Participants were provided consent forms. The voluntary nature of the survey and confidentiality and anonymity of responses was stressed (Melton & Gray, 1988). Participants were asked to fill out the questionnaires after supportive services were provided. Approximately 80% of the persons who volunteered for the study filled out the questionnaires, which required around 60 minutes to complete. Risks, discomforts, and potential benefits were discussed, and participants were encouraged to ask questions or raise concerns. The questionnaires were put in random order in the packet.

Symptom Checklist-90 Revised (SCL-90R). The SCL-90R (Derogatis, 1977) is a multidimensional self-report symptom inventory designed to measure symptomatic psychological distress. It consists of a 90-item checklist designed to reflect the psychological symptom patterns of psychiatric as well as medical patients. The Global Severity Index (GSI) is used where a single summary measure of psychological distress is needed. Calculation of the GSI involves summing the total numbers of symptoms multiplied by degree of severity. Severity ranges are represented by scores of 0 (not at all distressing) through 4 (extremely distressing). Internal consistency and test-retest reliability estimates fall within the .80s.

Validity studies are numerous. The instrument has been used extensively with medical patients. Derogatis, Abeloff, and Melisarats (1979) employed the instrument with short- and long-term survivors of cancer. Results indicated significantly greater GSI in long-term survivors.

Nungesser Homosexual Attitudes Inventory (NHAI). The NHAI (Nungesser, 1983) was developed to measure internalized homophobia for homosexual men. The scale includes three categories described as (a) Attitudes toward the fact of one's own homosexuality, (b) Attitudes toward homosexuality in general and toward other homosexual males, and (c) Attitudes toward the fact of one's homosexuality being known by others. Subscale alpha reliabilities are as follows:

| | |
|---|---|
| Subscale A (self) | .95 |
| Subscale B (others) | .88 |
| Subscale C (disclosure) | .91 |
| Full Scale Total | .94 |

Responses to 34 questions such as "homosexual lifestyles are not as fulfilling as heterosexual lifestyles" are rated true or false. The NHAI has demonstrated validity with scores associated with frequency of attempting to pass as a heterosexual, being in the "closet" or open about sexual preference, frequency of socializing with gay males, and number of homosexual experiences (Nungesser, 1983). For purposes of the present research, subscale A (self) and the Full Scale score were used in the analysis.

Perceived Social Support from Friends and Family (PSS-Fr and PSS-Fa). Social support from family and friends was assessed by Procidano and Heller's Perceived Social Support from Friends (PSS-Fr) and from Family (PSS-Fa) scales. Both scales have been demonstrated to be homogeneous measures, with Cronbach's alpha reliabilities of .88 and .90, respectively. Each contains 20 items rated "true, false or I don't know." Mean scores for the general population on the PSS-Fr and PSS-Fa are 15.5, SD 5.08 and 13.40, SD 4.83, respectively. Factor analyses indicated each scale to be composed of a single factor and to pertain to emotional support. The scales have been significantly correlated to Langers' symptom scores (Langer, 1962), and the Life Events Survey (Sarason, Johnson, & Siegel, 1978), indicating a relationship between this perceived social support instrument and psychological distress. Additional validation studies are available in the literature (Procidano & Heller, 1983).

Family of Origin Scale (FOS). The FOS (Hovestadt, Anderson, Piercy, & Fine, 1983) was used to gather data related to perceived family of origin experiences. The FOS is a 40-item, paper-and-pencil instrument which uses a 5-point Likert format and has a range of possible scores from 40 to 200. A test-retest reliability coefficient of .97 was obtained for the FOS using the responses of 41 graduate psychology students. In addition, Cronbach's coefficient alpha was calculated to obtain an internal consistency reliability of .75 and a standardized item alpha of .97.

Content validity for the FOS was established through ratings of items by six nationally known experts in marriage and family therapy. Hovestadt et al. (1983) reported criterion validity using significant differences ($p < .01$) between the FOS scores of subject groups representing high-medium and high-low scores on the Semantic Differential Scale (Osgood, Suci, & Tannenbaum, 1957).

Statistical Procedures

Data was analyzed by means of the General Linear Model Comparisons Procedure, which is the most general case of the least sum of squares solution (McNeil, Kelly, & McNeil, 1975; Cohen & Cohen, 1975; Draper & Smith, 1966; Tatsuoka, 1988). The F ratio was chosen to assess statistical significance and a two tailed non-directional test with a confidence level of .95 was chosen. Finally, the maintain the consistency of this confidence level across multiple comparisons, a correction for alpha error buildup was selected, calculated as follows:

$$\text{alpha}' = \text{alpha}_{n-1}$$

Where alpha is the alpha level set by the experimenter, n is the number of comparisons made in the experiment, and alpha' is the corrected alpha level (Newman & Fry, 1972). The probability level of .025 was needed for significance and to control for alpha error buildup while maintaining the chosen 95% confidence level.

## Results

Results are described in the following order: The sample is described in terms of its level of psychological distress, homophobia, social support, and family of origin experiences; correlations among these variables by group (HIV Spectrum Disorder, Untested, and Test Negative); followed by regression analyses to assess the relationship of homophobia, social support, and family of origin experiences to psychological distress.

As can be seen in Tables 1-7, respondents were experiencing a significant level of psychological distress, with the HIV spectrum disorder group more distressed than the untested or test negative groups. Self-perceived levels of health relative to family of origin experiences were below average for all groups, social support from friends was significantly greater than that reported for family and level of internalized homophobia was significantly greater for the test negative group only.

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Insert Tables 1-4 About Here

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No significant age differences were found for psychological distress, family of origin experiences, social support variables, or internalized homophobia for all possible two-way group comparisons.

Tables 8-10 provide Pearson correlation coefficients for relationships among psychological distress, family of origin

experiences, social support variables, and internalized homophobia variables reported in this study. The results are presented by group.

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Insert Tables 5-7 About Here

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Internalized homophobia (self) was the only variable highly correlated with psychological distress ($r = .62$, $p < .0002$) for the test negative group only after controlling for multiple comparisons.

A discriminant analysis procedure and a point biserial correlation procedure were used to explore the differences between the three groups (HIV spectrum, test negative, and untested) regarding psychological distress, family of origin experiences, social support, and homophobia (see Tables 11-13).

Significant differences were found between the spectrum disorder group and the untested group using the predictor variables family of origin, social support and homophobia ($F(1, 120) = 5.007$, $p = 0.0012$).

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Insert Tables 8-13 About Here

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The differences between the tested negative group and the untested group were not significant ($F(1, 101) = 1.316$, $p = 0.2716$). Finally, with regard to the differences between the spectrum disorder group and the tested negative group, these differences were significant ($F(1, 100) = 2.984$, $p = 0.0249$).

The point biserial correlation matrix revealed a significant difference with the variables homophobia ($r = -0.32$, $p = 0.0032$) and psychological distress ($r = -0.30$, $p = 0.0071$). That is, the spectrum disorder group was significantly lower on homophobia and psychological distress.

The second analysis explored the relationship between measures of homophobia and psychological distress relative to each of the three research groups (HIV spectrum, tested negative, and untested). For the HIV spectrum group, the results showed no relationship between measures of homophobia and psychological distress. Both scales were nonsignificant in predicting distress (NHTOT: $F(1, 40) = 1.870$, $p = 0.184$; NHSA: $F(1, 40) = 1.895$, $p = 0.178$). (See Tables 14-15.)

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Insert Tables 14-15 About Here

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Similar results were found for the untested group (NHTOT: $F(1, 38) = 1.870$, $p = 0.092$; NHSA: $F(1, 32) = 1.895$, $p = .0401$). (See Tables 16-17.)

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Insert Tables 16-17 About Here

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For the tested negative group, however, there was a significant relationship between the NHSA scale and psychological distress ($F(1, 29) = 18.386$, $p = 0.0002$), but the rela

tionship between the Total NHSA Scale score and psychological distress was not significant ($F(1, 26) = 2.160$, $p = 0.154$). Tables 18-19 provide a summary of these results.

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Insert Tables 18-19 About Here

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The third analysis examined the relationship between social support variables and psychologist distress and their interaction for each of the three groups. The interaction between the two measures of social support (friends and family) and psychological distress was non-significant (HIV Spectrum: $F(1, 40) = 0239$, $p = 0.627$; Untested: $F(1, 42) = 0.0005$, $p = 0.983$; Tested Negative: $F(1, 28) = 0.185$, $p = 0.670$). Since the interaction in all three groups was found to be non-significant, the interaction term was pooled to gain power in testing the main effects of each scale of social support (social support of friends, and social support of family). The results indicated thatonly within the HIV spectrum group was a significant main effect found. This was the main effect for the social support of friends scale ($F(1, 40) = 8.705$, $p = 0.0052$) in predicting psychological distress. This negative relationship between social support of friends and psychological distress was found while holding constant the effect of the social support of family scale. The finding suggests that the higher the score on the friends scale, the lower the perceived psychological distress.

With regard to the family scale, no significant relationships were found between the family scale and psychological distress when covarying the effects of the friends scale ($F(1, 40) = 1.057$, $p = 0.310$). For both of the remaining groups, the relationship between the measures of Perceived social support (of friends and family) and psychological distress was non-significant (Untested Group: Friends: $F(1, 42) = 1.892$, $p = 0.176$), Family: ($F(1, 43) = 2.893$, $p = 0.096$) (Tested Negative Group: Friends: $F(1, 29) = 0.185$, $p = 0.670$, Family: $F(1, 29) = 0.000$, $p = 0.995$) (Tables 20-25 summarize these results.)

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Insert Tables 20-25 About Here

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The fourth analysis examined the relationships among family of origin, social support, and homophobia to psychological distress, looking at each independent variable's relationship with psychological distress while covarying the remaining variables. Overall, the results were significant (see Table 26).

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Insert Tables 26 About Here

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No significant relationships were found with the untested group (see Tables 27).

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Insert Table 27 About Here

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Findings for the test negative group were the most interesting. The relationship between family of origin and psychological distress while covarying social support and homophobia was non-significant ($F (1, 25) = 1.404$, $p = 0.247$). The relationship between homophobia and psychological distress while covarying social support and family of origin was significant ($F (1, 25) = 20.516$, $p = 0.0001$). The relationship between social support of friends and psychological distress while covarying family of origin and homophobia was non-significant ($F (1, 25 ) = 0.077$, $p = 0.784$). Finally, the relationship between the social support of family and psychological distress while covarying family of origin and homophobia was non-significant ($F (1, 25) = 0.830$, $p = 0.371$). (See Tables 28.)

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Insert Tables 28 About Here

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The fifth analysis explored the relationship between family of origin variables and psychological distress, suggesting that these variables might be predictive of distress for individuals within the HIV spectrum, untested and tested negative groups. For the HIV spectrum group, the results showed no significant relationship between Family of origin variables and psychological distress. This assessment was accomplished by

testing the interaction between the two subscales in predicting distress ($F(1,39) = 0.814$, $p = 0.372$). Table 29 provides a

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Insert Table 29 About Here

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summary of these findings. With the interaction being non-significant, the interaction term was pooled to gain power when testing for main effects of the autonomy scale independent of the intimacy scale, and the intimacy scale independent of the autonomy scale. Both of these main effects were non-significant (Autonomy: $F(1, 40) = 1.046$, $p = 0.312$; Intimacy: $F(1, 40) = 0.823$, $p = 0.369$). (See Table 30.)

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Insert Tables 30 About Here

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Finally, the variance accounted for by the total scale score in predicting stress was analyzed. This, too, was non-significant (Total: $F(1, 59) = 0.031$, $p = 0.861$). Table 44 provides a summary of the results of these analyses. For the untested and negative groups, the relationship between these family of origin variables and psychological distress was also analyzed. The results were highly similar to those that wee found for the HIV spectrum group; that is, no significant relationships were found (see Tables 31-37).

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Insert Tables 31-37 About Here

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## Discussion

This study was concerned with the role of individual, family, and social support variables when examining psychological distress and gay/bisexual men at varying levels of risk for AIDS. The data generally support the notion of a broad conceptualization of stress within the AIDS, ARC, HIV+, test negative, and untested groups, but did not support the belief that family of origin variables, social support variables, or homophobia would be useful as predictors of psychological distress in persons with HIV spectrum disorders. We deal with each of these issues in turn and conclude with the limitations and implications of this study.

The results of the present study provide some evidence that the untested group was less stressed than either the test-negative or the HIV spectrum disorder group, and that the HIV spectrum disorder group experienced significantly greater distress than the untested or test negative groups. This finding appears consistent with the results reported by Nichols (1985) and Joseph, Emmons et al. (1984) on the psychosocial aspects of AIDS. These authors suggest that gay men have developed complex coping strategies in response to the complex stresses posed by the AIDS crisis. The gay men in our sample who had selected not to be tested for AIDS might have chosen a response of denial so complete that it led to a disregard of medical advice. On the other hand, given the dire consequences of a positive test result for AIDS, the decision to avoid testing might have been considered an equilibrium-reserving

response to a potential crisis. Another possible interpretation of this finding may be the belief expressed by some participants, "I know I don't have it."

Comparing the untested with the test negative group, it is possible that untested individuals don't feel at high risk, may be more bisexual, and don't feel stressed about life in general. Joseph, Emmons et al. (1984) report that the gay community is involved in considerable change, some of it centering on a reduction in the number and type of sexual activities. Our sample might be representative of some of these changes, with the result that these individuals were experiencing an increase in their sense of safety or optimism. Another possible explanation is that our test-negative group may have been experiencing a transitional stage where anger, guilt, and anxiety superceded denial (Zich & Temoshok, 1987) or these individuals may have been experiencing survival guilt and increased stress for being spared (Kaplan et al., 1987; Moulton et al., 1987).

Findings from this study do not support the research regarding the influence of family of origin experiences upon later life functioning (Bowen, 1987; Hovestadt et al., 1983; Wilcoxon & Hovestadt, 1983). The reasons for this may be related to the stress already inherent in the gay male's relationship with family. Since nearly every gay person believes that disclosing his sexual orientation will lead to a family crisis (Cramer & Roach, 1988; Wirth, 1978), individuals in this study may not have disclosed their sexual orientation, thereby

preserving a positive or neutral view toward family of origin experiences. Although supporting data is not available, it is also possible that these individuals had disclosed their orientation, but family members reacted positively to disclosure, resulting in a lowered stress level relative to the family unit.

Regarding social support, the results indicated that all participants reported a significantly higher amount of social support from friends as compared with that reported from family. This finding appears consistent with our results related to early family experiences and corroborates earlier research findings (Zich & Temoshok, 1987). For all groups, increased psychological distress was associated with perceiving less availability of support from friends, but increased psychological distress was not associated with perceiving less availability of support from family. It seems clear from these findings that issues involving significant others, other than immediate family, are of critical importance for gay men across the entire AIDS spectrum. The results concerning internalized homophobia suggest several explanations. Previous research suggests that gay men expressing internalized homophobia may have reduced gay support systems and significantly increased distress (Nungesser, 1983). This finding appears to be supported by the present research for the test negative group only. That homophobia did not significantly correlate with psychological distress among the HIV spectrum group might imply that for this group, other variables, such as health status,

take precedence and concern for life precludes concerns about one's sexual preference. Alternatively, these results might also suggest that this group, in dealing with AIDS-related issues, has dealt with their sexuality in an accepting manner.

The untested group's lack of correlation between homophobia and distress might imply a pattern of denial. Consistent with their lower stress scores in general, these persons may be defended against AIDS-related issues and concerns. An added explanation is that indeed these persons are more comfortable with their lifestyle and thus are not experiencing tension over their sexual orientation or feel at risk for infection.

That internalized homophobia significantly predicted stress in the negative group raises interesting questions. These persons who test negative may not be stressed regarding their own health status, however,these individuals are having to deal with drastic changes within their social and sexual lifestyles. The implications of being gay in the world of AIDS has been devastating for many, as prejudices and blame surface, both internally and externally. Some persons within this negative group may be experiencing "survivor's guilt," a phenomenon of reactions to others' HIV status centering around guilt for being spared of infection when others are so sick (Martin, 1988). As these persons attempt to find ways of surviving while many of their significant others are dying, internalized homophobia may surface. Another explanation for the high correlation between stress and homophobia for this group might

relate to lifestyle differences. These persons may have been uncomfortable with their homosexual feelings prior to AIDS, and thus engaged in less high risk behaviors. Although negative, they continue to be in conflict over their sexuality. Nungesser (1983) also associated increased internalized homophobia with disclosure of one's sexual preference to immediate family, which may offer additional support for the belief that the majority of individuals in the present study may not have disclosed to family. We will address the implications of these findings for practitioners in the next section.

Finally, several methodological points should be mentioned. First, we feel the study met one of the major criteria for collecting qualitative data by studying not only gay men who have AIDS, but others whose lives have been impacted by the threat of AIDS (Joseph, Emmons et al., 1984). Second, inherent in a study of this type are limitations, and these must be considered when interpreting the results. The sampling was done in the midwestern part of the U.S., and the results reflect this limited sampling. It should be noted that research in the gay community has experienced problems with representative sample and the present research is no exception. Perhaps most importantly, however, AIDS Dementia Complex (ADC) and other neurological complications of AIDS can present symptoms often indistinguishable from symptoms of stress (Tross & Hirsch, 1988). Thus, an increase in the measure of stress may arise from the progression of the disease and not from psychological influences. For example, ADC is marked by cogni

tive symptoms such as mental slowing and deficits in recent memory. These symptoms can surface prior to any identifiable neurological signs and thus be considered a stress related symptom. Therefore, in this study the measure of stress may be confounded. The problems in neuropsychological assessment prevent the clear differentiation of diagnoses. Thus, at present, it is impossible to talk about stress separately from CNS complications (Baum & Nesselhof, 1988). Finally, like most research in this area, the results are subject to instrumentation imitations, self-selection bias, and the lack of biochemical measures. Despite these problems, the present study affirms the importance of social support systems for gay men facing the AIDS crisis and questions the importance of past family history or present family support in lessening the psychological distress experienced by gay males.

## Implications

The psychosocial stress associated with the AIDS crisis remains a pervasive problem for gay men, their significant others, their families, and mental health professionals providing therapeutic services. Although many approaches to therapy are available, it would appear that many of the issues relevant to all groups affected by AIDS can be addressed using a peer support group-family treatment approach. Within the peer group context, the therapist can help group members and their significant others to deal with the themes of (a) denial, (b) severe anxiety related to the exposure and transmission of AIDS, and (c) depression associated with loss and powerless-

ness. Based upon feedback from group members, an individual may more objectively explore the appropriateness of his feelings and behaviors related to the psychosocial stress of AIDS. For example, several of the present authors have developed intervention techniques using metaphor, sculpting, paradox, empty chair, role-play, and co-therapy to assist this population to focus on the issues surrounding sexuality, death, disease, and relationships with significant others. The data from the present study clearly reinforces the necessity for therapeutic work with friends. It would appear that the use of peer support groups must be considered a priority by counselors treating gay/bisexual men at varying levels of risk for AIDS and where group treatment is not available, counselors may need to approach hospital and university agency personnel with requests to offer this service, on a volunteer basis if necessary.

Our suggestions relative to the involvement of family members are more tentative, given the present findings. Should family work become necessary, as in the case of an individual wishing to disclose his sexual preference and/or AIDS-related diagnosis to his family of origin, the therapeutic work could focus on the possible rejection of parents, siblings, and extended family. Since the data indicate that many gays first disclose to a sibling, centering on this dyad might help the therapist in exploring family attitudes and preparing a treatment plan for work with the entire family. The major therapeutic goal is to use the disclosure as a means for improving

familial relationships and to relieve the burden of distance. In any case, our findings suggest that family therapists need to be aware of an individual's potential disengagement from their family of origin, which might have been in process for some time. Issues related to individuation, countertransference, chronic illness, and death will provide central in family work. Through the use of family and group therapy, family members can address the issues confronting them as a family, while the gay male is able to address personal issues in the group setting. As researchers, we continue to seek new information regarding this special population; as clinicians we continue to share, grieve, and hope.

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Table 1

Measures of Central Tendency and Variability
Including All Variables for Total Sample (HIV
Spectrum, Tested Negative and Untested Subjects)

| Variable | N | Mean | Median | Mode | Standard Deviation | Std. Error of Mean |
|---|---|---|---|---|---|---|
| FAMTOT2 | 151 | 81.97 | 82.00 | 83.00 | 08.39 | 00.68 |
| AUTO2 | 152 | 41.13 | 41.00 | 38.00 | 05.64 | 00.46 |
| INTM2 | 159 | 40.91 | 40.00 | 39.00 | 05.03 | 00.40 |
| NHTOT | 110 | 07.52 | 05.00 | 03.00 | 05.99 | 00.57 |
| NHSA | 128 | 01.39 | 01.00 | 00.00 | 02.00 | 00.18 |
| GSI | 130 | 00.73 | 00.59 | 00.13 | 00.57 | 00.05 |
| PSFA | 155 | 08.94 | 09.00 | 11.00 | 02.13 | 00.17 |
| PSFR | 159 | 10.65 | 11.00 | 12.00 | 02.05 | 00.16 |

Table 2

Measures of Central Tendency and Variability
Including All Variables for the HIV
Spectrum Disorder Group

| Variable | N | Mean | Median | Mode | Standard Deviation | Std. Error of Mean |
|---|---|---|---|---|---|---|
| FAMTOT2 | 55 | 83.36 | 83.00 | 83.00 | 08.85 | 01.19 |
| AUTO2 | 55 | 41.51 | 40.00 | 44.00 | 06.28 | 00.85 |
| INTM2 | 57 | 41.86 | 41.00 | 40.00 | 04.84 | 00.64 |
| NHTOT | 35 | 10.34 | 08.00 | 05.00 | 06.97 | 01.17 |
| NHSA | 42 | 02.33 | 01.00 | 00.00 | 02.67 | 00.41 |
| GSI | 45 | 01.05 | 00.94 | 00.41 | 01.05 | 00.09 |
| PSFA | 57 | 09.23 | 09.00 | 11.00 | 02.04 | 00.27 |
| PSFR | 60 | 10.92 | 12.00 | 12.00 | 02.32 | 00.30 |

FAMTOT2 - Family of Origin Total Scale
AUTO2 - Family of Origin Autonomy Scale
INTM2 - Family of Origin Intimacy Scale
NHTOT - Nungesser Homosexual Attitudes Inventory, Total Scale
NHSA - Nungesser Homosexual Attitudes Inventory, Subscale A
GSI - Symptom Checklist-90 Revised Global Severity Index
PSFA - Perceived Social Support From Family
PSFR - Perceived Socia Support From Friends

Table 3

Measures of Central Tendency and Variability
Including All Variables for Untested Group

| Variable | N | Mean | Median | Mode | Standard Deviation | Std. Error of Mean |
|---|---|---|---|---|---|---|
| FAMTOT2 | 56 | 80.05 | 81.00 | 81.00 | 07.37 | 00.98 |
| AUTO2 | 57 | 40.18 | 40.00 | 38.00 | 04.76 | 00.63 |
| INTM2 | 59 | 40.02 | 39.00 | 39.00 | 04.68 | 00.61 |
| NHTOT | 41 | 05.37 | 04.00 | 03.00 | 04.06 | 00.63 |
| NHSA | 48 | 00.83 | 01.00 | 00.00 | 01.02 | 00.14 |
| GSI | 50 | 00.46 | 00.37 | 00.13 | 00.38 | 00.05 |
| PSFA | 57 | 08.78 | 09.00 | 11.00 | 02.27 | 00.30 |
| PSFR | 57 | 10.63 | 11.00 | 12.00 | 01.55 | 00.21 |

Table 4

Measures of Central Tendency and Variability
Including All Variables for Tested Negative Group

| Variable | N | Mean | Median | Mode | Standard Deviation | Std. Error of Mean |
|---|---|---|---|---|---|---|
| FAMTOT2 | 39 | 82.54 | 83.00 | 73.00 | 08.82 | 01.41 |
| AUTO2 | 39 | 41.77 | 43.00 | 43.00 | 05.78 | 00.92 |
| INTM2 | 41 | 40.71 | 41.00 | 39.00 | 05.65 | 00.88 |
| NHTOT | 33 | 06.61 | 06.00 | 01.00 | 04.75 | 00.83 |
| NHSA | 37 | 00.86 | 00.00 | 00.00 | 01.30 | 00.21 |
| GSI | 34 | 00.68 | 00.54 | 00.53 | 00.61 | 00.10 |
| PSFA | 39 | 08.72 | 09.00 | 11.00 | 02.10 | 00.34 |
| PSFR | 40 | 10.33 | 11.00 | 12.00 | 02.21 | 00.35 |

FAMTOT2 - Family of Origin Total Scale
AUTO2 - Family of Origin Autonomy Scale
INTM2 - Family of Origin Intimacy Scale
NHTOT - Nungesser Homosexual Attitudes Inventory, Total Scale
NHSA - Nungesser Homosexual Attitudes Inventory, Subscale A
GSI - Symptom Checklist-90 Revised Global Severity Index
PSFA - Perceived Social Support From Family
PSFR - Perceived Socia Support From Friends

Table 5

Correlation Matrix for HIV Spectrum Group with Family of Origin Variables, Perceived Social Support Variables and Homophobia Variables with a Measure of Psychological Distress (the General Severity Index from the SCL-90R)

| | | GAMTOT2 | AUTO2 | INTM2 | | |
|---|---|---|---|---|---|---|
| GSI | r | -0.0275 | -0.1115 | 0.0792 | | |
| | $r^2$ | 0.0008 | 0.024 | 0.0063 | | |
| | p | 0.8610 | 0.4764 | 0.6092 | | |
| | a' | 0.0250 | 0.0250 | 0.0250 | | |
| | n | 43 | 43 | 44 | | |
| | | NHTOT | NHSA | PSFA | PSFR | |
| GSI | r | 0.2688 | 0.2437 | 0.1140 | -0.3796 | |
| | $r^2$ | 0.0723 | 0.0594 | 0.0130 | 0.1441 | |
| | p | 0.1842 | 0.1788 | 0.4610 | 0.0101 | |
| | a' | 0.0250 | 0.0250 | 0.0250 | | |
| | n | 26 | 32 | 44 | 45 | |

Note:

FAMTOT2 = Family of Origin Total Scale
AUTO2 = Family of Origin Autonomy Scale
INTM2 = Family of Origin Intimacy Scale
NHTOT = Nungesser Homosexual Attitudes Inventory, Total Scale
NHSA = Nungesser Homosexual Attitudes Inventory, Subscale A
GSI = Symptom Checklist-90 Revised Global Severity Index
PSFA = Perceived Social Support From Family
PSFR = Perceived Social Support From Friends

Table 6

Correlation Matrix for Untested Group with Family of Origin Variables, Perceived Social Support Variables and Homophobia Variables with a Measure of Psychological Distress (the General Severity Index from the SCL-90R)

| | | GAMTOT2 | AUTO2 | INTM2 | |
|---|---|---|---|---|---|
| GSI | r | 0.0874 | 0.0901 | 0.0044 | |
| | $r^2$ | 0.0076 | 0.0081 | 0.00002 | |
| | p | 0.5632 | 0.5468 | 0.9757 | |
| | a' | 0.0250 | 0.0250 | 0.0250 | |
| | n | 46 | 47 | 49 | |
| GSI | r | 0.2935 | 0.3260 | -0.2959 | -0.2706 |
| | $r^2$ | 0.0052 | 0.1063 | 0.0876 | 0.0732 |
| | p | 0.0920 | 0.0401 | 0.0434 | 0.0658 |
| | a' | 0.0250 | 0.0250 | 0.0250 | 0.0250 |
| | n | 34 | 40 | 47 | 47 |

Note:

FAMTOT2 = Family of Origin Total Scale
AUTO2 = Family of Origin Autonomy Scale
INTM2 = Family of Origin Intimacy Scale
NHTOT = Nungesser Homosexual Attitudes Inventory, Total Scale
NHSA = Nungesser Homosexual Attitudes Inventory, Subscale A
GSI = Symptom Checklist-90 Revised Global Severity Index
PSFA = Perceived Social Support From Family
PSFR = Perceived Social Support From Friends

Table 7

Correlation Matrix for Tested Negative Group with Family of Origin Variables, Perceived Social Support Variables and Homophobia Variables with a Measure of Psychological Distress (the General Severity Index from the SCL-90R)

| | | FAMTOT2 | AUTO2 | INTM2 | |
|---|---|---|---|---|---|
| GSI | r | 0.0505 | 0.1223 | -0.1870 | |
| | $r^2$ | 0.0026 | 0.0150 | 0.0350 | |
| | p | 0.7798 | 0.4977 | 0.2894 | |
| | a' | 0.0250 | 0.0250 | 0.0250 | |
| | n | 33 | 33 | 34 | |
| | | NHTOT | NHSA | PSFA | PSFR |
| GSI | r | 0.2769 | 0.6229 | 0.0127 | 0.0543 |
| | $r^2$ | 0.0767 | 0.3880 | 0.0002 | 0.0029 |
| | p | 0.1537 | 0.0002 | 0.9446 | 0.7638 |
| | a' | 0.0250 | 0.0250 | 0.0250 | 0.0250 |
| | n | 28 | 31 | 32 | 33 |

Note:

FAMTOT2 = Family of Origin Total Scale
AUTO2 = Family of Origin Autonomy Scale
INTM2 = Family of Origin Intimacy Scale
NHTOT = Nungesser Homosexual Attitudes Inventory, Total Scale
NHSA = Nungesser Homosexual Attitudes Inventory, Subscale A
GSI = Symptom Checklist-90 Revised Global Severity Index
PSFA = Perceived Social Support From Family
PSFR = Perceived Social Support From Friends

Table 8

Discriminant Analysis Between the Spectrum Disorder Group and the Untested Group on Social Support, Family of Origin, Homophobia, and Psychological Distress

| $R^2$full | $R^2$rest | df | F | $f^2$ | p | alpha | alpha' |
|---|---|---|---|---|---|---|---|
| 0.2086 | 0.0000 | 1,80 | 5.007 | 0.26 | 0.0012 | 0.05 | 0.025 |

| VARIABLE | DF | ESTIMATE | PARAMETER=0 | PROB>:t: |
|---|---|---|---|---|
| INTERCEPT | 1 | -1.1011 | -1.938 | 0.0564 |
| FAMTOT2 | 1 | 0.0154 | 2.498 | 0.0146 |
| NHSA | 1 | 0.0865 | 3.629 | 0.0005 |
| PFA | 1 | 0.0375 | 1.584 | 0.1174 |
| PSFR | 1 | -0.0155 | -0.596 | 0.5527 |

Table 9

Point Biserial Correlation Matrix Between the Spectrum Disorder Group and the Untested Group on Social Support, Family of Origin, Homophobia, and Psychological Distress

| | | FAMTOT2 | NHSA | GSI | PSFA | PSFR |
|---|---|---|---|---|---|---|
| AGRP1 | r | 0.2010 | 0.3593 | 0.5268 | 0.1020 | 0.0722 |
| | $r^2$ | 0.040 | 0.129 | 0.278 | 0.010 | 0.005 |
| | p | 0.0343 | 0.0005 | 0.0001 | 0.2802 | 0.4394 |
| | a' | 0.0250 | 0.0250 | 0.0250 | 0.0250 | 0.0250 |
| | n | 111 | 90 | 95 | 14 | 117 |

Note:

FAMTOT2 = Family of Origin Total Scale Score
NHSA = Scale A of NHAI
GSI = General Severity Index of the SCL-90R
PSFA = Perceived Social Support of Family
PSFR = Peceived Socila Support of Friends
AGRP1 = Dichotomous Variable: 1 = HIV Spectrum Group; 0 = Untested Group

Table 10

Discriminant Analysis Between the Tested Negative Group and the Untested Group on Social Support, Family of Origin, Psychological Distress, and Homophobia

| $R^2$full | $R^2$rest | df | F | $f^2$ | p | alpha | alpha' |
|---|---|---|---|---|---|---|---|
| 0.0656 | 0.0000 | 1,79 | 1.316 | 0.07 | 0.2716 | 0.05 | 0.025 |

| VARIABLE | DF | PARAMETER ESTIMATE | T FOR HO PARAMETER=0 | PROB>:t: |
|---|---|---|---|---|
| INTERCEPT | 1 | 1.0654 | 0.708 | 0.1371 |
| FAMTOT2 | 1 | -0.0112 | -1.653 | 0.1025 |
| NHSA | 1 | 0.0008 | 0.051 | 0.9863 |
| PFA | 1 | -0.0059 | -0.217 | 0.8287 |
| PSFR | 1 | 0.0425 | 1.352 | 0.1804 |

Table 11

Point Biserial Correlation Matrix Between the Tested Negative Group and the Untested Group on Social Support, Family of Origin, Psychological Distress and Homophobia

| | | FAMTOT2 | NHSA | GSI | PSFA | PSFR |
|---|---|---|---|---|---|---|
| AGRP2 | r | -0.1527 | -0.0138 | -0.2199 | 0.0161 | 0.0820 |
| | $r^2$ | 0.023 | 0.0001 | 0.048 | 0.0002 | 0.0006 |
| | p | 0.1395 | 0.9002 | 0.0444 | 0.8763 | 0.4244 |
| | a' | 0.0250 | .0250 | 0.0250 | 0.0250 | 0.0250 |
| | n | 95 | 85 | 84 | 96 | 97 |

Note:

FAMTOT2 = Family of Origin Total Scale Score
NHSA = Scale A of NHAI
GSI = General Severity Index of the SCL-90R
PSFA =- Peceived Social Supiport of Family
PSFR = Perceived Social Support of Friends
AGRP1 = Dichotomous Variable: 1 = Untested Group; 0 = Tested Negative Group

Table 12

Discriminant Analysis Between the Tested Negative Group and the Spectrum Disorder Group on Social Support, Family of Origin, Homophobia, and Psychological Distress

| $R^2$full | $R^2$rest | df | F | $f^2$ | p | alpha | alpha' |
|---|---|---|---|---|---|---|---|
| 0.1493 | 0.0000 | 1,72 | 2.984 | 0.17 | 0.0249 | 0.05 | 0.025 |

| VARIABLE | DF | PARAMETER ESTIMATE | T FOR HO PARAMETER=0 | PROB>:t: |
|---|---|---|---|---|
| INTERCEPT | 1 | 1.7489 | 2.370 | 0.0206 |
| FAMTOT2 | 1 | -0.0057 | -0.848 | 0.3995 |
| NHSA | 1 | -0.0730 | -2.980 | 0.0040 |
| PSFA | 1 | -0.0429 | -1.454 | 0.1506 |
| PSFR | 1 | -0.0263 | -1.145 | 0.2560 |

Table 13

Point Biserial Correlation Matrix Between the Tested Negative Group and the Spectrum Disorder Group on Social Support, Family of Origin, Homophobia, and Psychological Distress

| | | FAMTOT2 | NHSA | GSI | PSFA | PSFR |
|---|---|---|---|---|---|---|
| AGRP3 | r | -0.0465 | -0.3281 | -0.3007 | -0.1218 | -0.1274 |
| | $r^2$ | 0.0021 | 0.1076 | 0.0904 | 0.0148 | 0.0162 |
| | p | 0.0656 | 0.0032 | 0.0071 | 0.2370 | 0.2066 |
| | a' | 0.0250 | 0.0250 | 0.0250 | 0.0250 | 0.0250 |
| | n | 94 | 79 | 79 | 96 | 100 |

Note:

FAMTOT2 = Family of Origin Total Scale Score
NHSA = Scale A of NHAI
GSI = General Severity Index of the SCL-90R
PSFA = Perceived Social Support of Family
PSFR = Peceived Socila Support of Friends
AGRP1 = Dichotomous Variable: 1 = HIV Spectrum Group; 0 = Untested Group

Table 14

Variance Accounted for by Scale A of the NHAI in Predicting Psychological Distress for the HIV Spectrum Disorder Group

| $R^2$full | $R^2$rest | df | F | $f^2$ | p | alpha | alpha' |
|---|---|---|---|---|---|---|---|
| 0.0594 | 0.0000 | 1,40 | 1.895 | 0.06 | 0.178 | 0.05 | 0.025 |

| VARIABLE | DF | PARAMETER ESTIMATE | T FOR HO PARAMETER=0 | PROB>:t: |
|---|---|---|---|---|
| INTERCEPT | 1 | 0.9680 | 6.964 | 0.0001 |
| NHSA | 1 | 0.0521 | 1.377 | 0.1788 |

Note: NHSA = Scale A of the Nungesser Homosexual Attitude Inventory

Table 15

Variance Accounted for by the Total Scale Score
of the NHAI in Predicting Psychological Distress
for the HIV Spectrum Disorder Group

| $R^2$full | $R^2$rest | df | F | $f^2$ | p | alpha | alpha' |
|---|---|---|---|---|---|---|---|
| 0.0723 | 0.0000 | 1,40 | 1.870 | 0.08 | 0.184 | 0.05 | 0.025 |

| VARIABLE | DF | PARAMETER ESTIMATE | T FOR HO PARAMETER=0 | PROB>:t: |
|---|---|---|---|---|
| INTERCEPT | 1 | 0.9851 | 4.918 | 0.0001 |
| NHTOT | 1 | 0.0218 | 1.367 | 0.1842 |

Note: NHTOT = Total Score of the Nungesser Homosexual Attitude Inventory

Table 16

Variance Accounted for by Scale A of the NHAI in Predicting Psychological Distress for the Untested Group

| $R^2$full | $R^2$rest | df | F | $f^2$ | p | alpha | alpha' |
|---|---|---|---|---|---|---|---|
| 0.1063 | 0.0000 | 1,38 | 4.519 | 0.12 | 0.0401 | 0.05 | 0.025 |

| VARIABLE | DF | PARAMETER ESTIMATE | T FOR HO PARAMETER=0 | PROB>:t: |
|---|---|---|---|---|
| INTERCEPT | 1 | 0.3602 | 4.626 | 0.0001 |
| NHSA | 1 | 0.1242 | 2.126 | 0.0401 |

Note: NHSA = Scale A of the Nungesser Homosexual Attitude Inventory

Table 17

Variance Accounted for by the Total Scale Score of the NHAI in Predicting Psychological Distress for the Untested Group

| $R^2$full | $R^2$rest | df | F | $f^2$ | p | alpha | alpha' |
|---|---|---|---|---|---|---|---|
| 0.0862 | 0.0000 | 1,32 | 3.018 | 0.09 | 0.092 | 0.05 | 0.025 |

| VARIABLE | DF | PARAMETER ESTIMATE | T FOR HO PARAMETER=0 | PROB>:t: |
|---|---|---|---|---|
| INTERCEPT | 1 | 0.3169 | 2.701 | 0.0110 |
| NHTOT | 1 | 0.0299 | 1.737 | 0.0920 |

Note: NHTOT = Total Score of the Nungesser Homosexual Attitude Inventory

Table 18

Variance Accounted for by Scale A of the NHAI in Predicting Psychological Distress for the Tested Negative Group

| $R^2$full | $R^2$rest | df | F | $f^2$ | p | alpha | alpha' |
|---|---|---|---|---|---|---|---|
| 0.3880 | 0.0000 | 1,29 | 18.386 | 0.63 | 0.0002 | 0.05 | 0.025 |

| VARIABLE | DF | PARAMETER ESTIMATE | T FOR HO PARAMETER=0 | PROB>:t: |
|---|---|---|---|---|
| INTERCEPT | 1 | 0.4151 | 3.740 | 0.0008 |
| NHSA | 1 | 0.2857 | 4.288 | 0.0002 |

Note: NHSA = Scale A of the Nungesser Homosexual Attitude Inventory

Table 19

Variance Accounted for by the Total Scale Score of the NHAI in Predicting Psychological Distress for the Tested Negative Group

| $R^2$full | $R^2$rest | df | F | $f^2$ | p | alpha | alpha' |
|---|---|---|---|---|---|---|---|
| 0.0767 | 0.0000 | 1,26 | 2.160 | 0.08 | 0.154 | 0.05 | 0.025 |

| VARIABLE | DF | PARAMETER ESTIMATE | T FOR HO PARAMETER=0 | PROB>:t: |
|---|---|---|---|---|
| INTERCEPT | 1 | 0.4570 | 2.179 | 0.0386 |
| NHTOT | 1 | 0.0371 | 1.470 | 0.1537 |

Note: NHTOT = Total Score of the Nungesser Homosexual Attitude Inventory

Table 20

Unique Variance Accounted for by the Interaction Between Family and Friends Subscales of the Perceived Social Support Family--Friends Instrument in Predicting Psychological Distress for the HIV Spectrum Group

| $R^2$full | $R^2$rest | df | F | $f^2$ | p | alpha | alpha' |
|---|---|---|---|---|---|---|---|
| 0.1907 | 0.1859 | 1,40 | 0.239 | 0.006 | 0.6272 | 0.05 | 0.025 |

| VARIABLE | DF | PARAMETER ESTIMATE | T FOR HO PARAMETER=0 | PROB>:t: |
|---|---|---|---|---|
| INTERCEPT | 1 | 2.2942 | 1.753 | 0.0873 |
| PSFA | 1 | -0.0283 | -0.198 | 0.8441 |
| PSFR | 1 | -0.1569 | -1.224 | 0.2281 |
| FAFR | 1 | 0.068 | 0.490 | 0.6270 |

Note:

PSFA = Perceived Social Support of Family
PSFR = Perceived Social Support of Friends
FAFR = Interaction Between Family Scale & Friends Scale

Table 21

Unique Variance Accounted for by the Family Subscale of the Perceived Social Support Family--Friends Instrument in Predicting Psychological Distress for the HIV Spectrum Group

| $R^2$full | $R^2$rest | df | F | $f^2$ | p | alpha | alpha' |
|---|---|---|---|---|---|---|---|
| 0.1859 | 0.1649 | 1,41 | 1.057 | 0.03 | 0.310 | 0.05 | 0.025 |

| VARIABLE | DF | PARAMETER ESTIMATE | T FOR HO PARAMETER=0 | PROB>:t: |
|---|---|---|---|---|
| INTERCEPT | 1 | 1.6981 | 3.563 | 0.0009 |
| PSFA | 1 | 0.0391 | 1.028 | 0.3100 |
| PSFR | 1 | -0.0962 | -2.950 | 0.0052 |

Note:

PSFA = Perceived Social Support of Family
PSFR = Perceived Social Support of Friends

Table 22

Unique Variance Accounted for by the Interaction Between Family and Friends Subscales of the Perceived Social Support Family--Friends Instrument in Predicting Psychological Distress for the Tested Negative Group

| $R^2$full | $R^2$rest | df | F | $f^2$ | p | alpha | alpha' |
|---|---|---|---|---|---|---|---|
| 0.0072 | 0.0065 | 1,28 | 0.019 | 0.001 | 0.0890 | 0.05 | 0.025 |

| VARIABLE | DF | PARAMETER ESTIMATE | T FOR HO PARAMETER=0 | PROB>:t: |
|---|---|---|---|---|
| INTERCEPT | 1 | 0.8594 | 0.288 | 0.7752 |
| PSFA | 1 | -0.0466 | -0.136 | 0.8927 |
| PSFR | 1 | -0.0179 | -0.060 | 0.9526 |
| FAFR | 1 | 0.0047 | 0.140 | 0.8900 |

Note:

PSFA = Perceived Social Support of Family
PSFR = Perceived Social Support of Friends
FAFR = Interaction Between Family Scale & Friends Scale

Table 23

Unique Variance Accounted for by the Family Subscale of the Perceived Social Support Family--Friends Instrument in Predicting Psychological Distress for the Tested Negative Group

| $R^2$full | $R^2$rest | df | F | $f^2$ | p | alpha | alpha' |
|---|---|---|---|---|---|---|---|
| 0.0065 | 0.0065 | 1,29 | 0.000 | 0.00 | 0.995 | 0.05 | 0.025 |

| VARIABLE | DF | PARAMETER ESTIMATE | T FOR HO PARAMETER=0 | PROB>:t: |
|---|---|---|---|---|
| INTERCEPT | 1 | 0.4556 | 0.646 | 0.5233 |
| PSFA | 1 | 0.0004 | 0.007 | 0.9945 |
| PSFR | 1 | 0.0231 | 0.430 | 0.6706 |

Note:

PSFA = Perceived Social Support of Family
PSFR = Perceived Social Support of Friends

Table 24

Unique Variance Accounted for by the Interaction Between Family and Friends Subscales of the Perceived Social Support Family--Friends Instrument in Predicting Psychological Distress for the Untested Group

| $R^2$full | $R^2$rest | df | F | $f^2$ | p | alpha | alpha' |
|---|---|---|---|---|---|---|---|
| 0.1317 | 0.1316 | 1,42 | 0.0005 | 0.001 | 0.983 | 0.05 | 0.025 |

| VARIABLE | DF | PARAMETER ESTIMATE | T FOR HO PARAMETER=0 | PROB>:t: |
|---|---|---|---|---|
| INTERCEPT | 1 | 1.4749 | 0.674 | 0.5039 |
| PSFA | 1 | -0.0502 | -0.183 | 0.8561 |
| PSFR | 1 | -0.0580 | -0.295 | 0.7692 |
| FAFR | 1 | 0.0005 | 0.022 | 0.9827 |

Note:

PSFA = Perceived Social Support of Family
PSFR = Perceived Social Support of Friends
FAFR = Interaction Between Family Scale & Friends Scale

Table 25

Unique Variance Accounted for by the Family Subscale of the Perceived Social Support Family--Friends Instrument in Predicting Psychological Distress for the Untested Group

| $R^2$full | $R^2$rest | df | F | $f^2$ | p | alpha | alpha' |
|---|---|---|---|---|---|---|---|
| 0.3165 | 0.0732 | 1,43 | 2.893 | 0.07 | 0.096 | 0.05 | 0.025 |

| VARIABLE | DF | PARAMETER ESTIMATE | T FOR HO PARAMETER=0 | PROB>:t: |
|---|---|---|---|---|
| INTERCEPT | 1 | 1.4279 | 3.363 | 0.0016 |
| PSFA | 1 | -0.0442 | -1.701 | 0.0962 |
| PSFR | 1 | -0.0538 | -1.375 | 0.1761 |

Note:

PSFA = Perceived Social Support of Family
PSFR = Perceived Social Support of Friends

Table 26

Unique Variance Accounted for by Family of Origin
in Predicting Psychological Distress While Covarying
Social Support and Homophobia for the HIV Spectrum Group

| $R^2$full | $R^2$rest | df | F | $f^2$ | p | alpha | alpha' |
|---|---|---|---|---|---|---|---|
| 0.2593 | 0.2369 | 1,24 | 0.725 | 0.03 | 0.403 | 0.05 | 0.025 |

| VARIABLE | DF | PARAMETER ESTIMATE | T FOR HO PARAMETER=0 | PROB>:t: |
|---|---|---|---|---|
| INTERCEPT | 1 | 0.2833 | 1.280 | 0.8267 |
| FAMTOT2 | 1 | 0.0101 | 0.851 | 0.4030 |
| NHSA | 1 | 0.0526 | 1.407 | 0.1724 |
| PSFA | 1 | 0.0762 | 1.398 | 0.1750 |
| PSFR | 1 | -0.0874 | -2.133 | 0.0433 |

Note:

FAMTOT2 = Family of Origin Total Scale Score
NHSA = Scale A of the NHAI
PSFA = Perceived Social Support of Family
PSFR = Perceived Social Support of Friends

Table 27

Unique Variance Accounted for by Family of Origin in Predicting Psychological Distress While Covarying Social Support and Homophobia for the Untested Group

| $R^2$full | $R^2$rest | df | F | $f^2$ | p | alpha | alpha' |
|---|---|---|---|---|---|---|---|
| 0.3425 | 0.3249 | 1,32 | 0.858 | 0.03 | 0.3612 | 0.05 | 0.025 |

| VARIABLE | DF | PARAMETER ESTIMATE | T FOR HO PARAMETER=0 | PROB>:t: |
|---|---|---|---|---|
| INTERCEPT | 1 | 1.3387 | 1.774 | 0.0855 |
| FAMTOT2 | 1 | 0.0070 | 0.926 | 0.3612 |
| NHSA | 1 | 0.0699 | 1.096 | 0.2811 |
| PSFA | 1 | -0.0646 | -2.108 | 0.0430 |
| PSFR | 1 | -0.0842 | -1.775 | 0.0854 |

Note:

FAMTOT2 = Family of Origin Total Scale Score
NHSA = Scalae A of the NHAI
PSFA = Perceived Social Support of Family
PSFR = Perceived Social Support of Friends

Table 28

Unique Variance Accounted for by Family of Origin
in Predicting Psychological Distress While Covarying
Social Support and Homophobia for the Tested Negative Group

| $R^2$full | $R^2$rest | df | F | $f^2$ | p | alpha | alpha' |
|---|---|---|---|---|---|---|---|
| 0.4596 | 0.4293 | 1,25 | 1.404 | 0.06 | 0.247 | 0.05 | 0.025 |

| VARIABLE | DF | PARAMETER ESTIMATE | T FOR HO PARAMETER=0 | PROB>:t: |
|---|---|---|---|---|
| INTERCEPT | 1 | 1.0043 | 0.742 | 0.4648 |
| FAMTOT2 | 1 | -0.0139 | -1.185 | 0.2472 |
| NHSA | 1 | 0.3149 | 4.529 | 0.0001 |
| PSFA | 1 | 0.0145 | 0.277 | 0.7840 |
| PSFR | 1 | 0.0420 | 0.911 | 0.3710 |

Note:

FAMTOT2 - Family of Origin Total Scale Score
NHSA - Scale A of the NHAI
PSFA - Perceived Social Support of Family
PSFR - Perceived Social Support of Friends

Table 29

Unique Variance Accounted for by the Interaction Between Autonomy and Intimacy Subscales of the Family of Origin Instrument in Predicting Psychological Distress for the HIV Spectrum Group

| $R^2$full | $R^2$rest | df | F | $f^2$ | p | alpha | alpha' |
|---|---|---|---|---|---|---|---|
| 0.0522 | 0.0324 | 1,39 | 0.814 | 0.02 | 0.372 | 0.05 | 0.025 |

| VARIABLE | DF | PARAMETER ESTIMATE | T FOR HO PARAMETER=0 | PROB>:t: |
|---|---|---|---|---|
| INTERCEPT | 1 | -2.3754 | -0.626 | 0.5350 |
| AUTO2 | 1 | 0.0599 | 0.697 | 0.4899 |
| INTM | 1 | 0.0926 | 1.085 | 0.2848 |
| AUTOINT | 1 | -0.0017 | -0.903 | 0.3723 |

Note:

AUTO2 = Family of Origin Autonomy Subscale
INTM2 = Family of Origin Intimacy Subscale
AUTOINT = Interaction Between Autonomy and Intimacy

Table 30

Unique Variance Accounted for by the Autonomy Subscale of the Family of Origin Instrument in Predicting Psychological Distress for the HIV Spectrum Group

| $R^2$full | $R^2$rest | df | F | $f^2$ | p | alpha | alpha' |
|---|---|---|---|---|---|---|---|
| 0.0324 | 0.0070 | 1,40 | 1.0-6 | 0.03 | 0.312 | 0.05 | 0.025 |

| VARIABLE | DF | PARAMETER ESTIMATE | T FOR HO PARAMETER=0 | PROB>:t: |
|---|---|---|---|---|
| INTERCEPT | 1 | 0.9692 | 1.186 | 0.2425 |
| AUTO2 | 1 | -0.0163 | -1.023 | 0.3126 |
| INTM2 | 1 | 0.0175 | 0.907 | 0.3697 |

Note:

AUTO2 = Family of Origin Autonomy Subscale
INTM2 = Family of Origin Intimacy Subscale

Table 31

Variance Accounted for by the Total Scale Score of the Family of Origin Instrument in Predicting Psychological Distress for the HIV Spectrum Group

| $R^2$full | $R^2$rest | df | F | $f^2$ | p | alpha | alpha' |
|---|---|---|---|---|---|---|---|
| 0.0008 | 0.0000 | 1,40 | 0.031 | 0.001 | 0.861 | 0.05 | 0.025 |

| VARIABLE | DF | PARAMETER ESTIMATE | T FOR HO PARAMETER=0 | PROB>:t: |
|---|---|---|---|---|
| INTERCEPT | 1 | 1.1794 | 1.476 | 0.1476 |
| FAMTOT2 | 1 | -0.0016 | -0.176 | 0.8610 |

Note:

FAMTOT2 = Family of Origin Total Scale Score

Table 32

Unique Variance Accounted for by the Interaction Between Autonomy and Intimacy Subscales of the Family of Origin Instrument in Predicting Psychological Distress for the Untested Group

| $R^2$full | $R^2$rest | df | F | $f^2$ | p | alpha | alpha' |
|---|---|---|---|---|---|---|---|
| 0.0176 | 0.0170 | 1,42 | 0.022 | 0.001 | 0.883 | 0.05 | 0.025 |

| VARIABLE | DF | PARAMETER ESTIMATE | T FOR HO PARAMETER=0 | PROB>:t: |
|---|---|---|---|---|
| INTERCEPT | 1 | -0.4231 | -0.108 | 0.9149 |
| AUTO2 | 1 | 0.0260 | 0.258 | 0.7973 |
| INTM2 | 1 | 0.0110 | 0.115 | 0.9091 |
| AUTOINT | 1 | -0.0004 | -0.148 | 0.8830 |

Note:

AUTO2 = Family of Origin Autonomy Subscale
INTM2 = Family of Origin Intimacy Subscale
AUTOINT = Interaction Between Autonomy and Intimacy

Table 33

Unique Variance Accounted for by the Autonomy Subscale of the Family of Origin Instrument in Predicting Psychological Distress for the Untested Group

| $R^2$full | $R^2$rest | df | F | $f^2$ | p | alpha | alpha' |
|---|---|---|---|---|---|---|---|
| 0.0170 | 0.0002 | 1,43 | 0.736 | 0.02 | 0.396 | 0.05 | 0.025 |

| VARIABLE | DF | PARAMETER ESTIMATE | T FOR HO PARAMETER=0 | PROB>:t: |
|---|---|---|---|---|
| INTERCEPT | 1 | 0.1520 | 0.247 | 0.8061 |
| AUTO2 | 1 | 0.0112 | 0.858 | 0.3956 |
| INTM2 | 1 | -0.0031 | -0.219 | 0.8278 |

Note:

AUTO2 = Family of Origin Autonomy Subscale
INTM2 = Family of Origin Intimacy Subscale

Table 34

Variance Accounted for by the Total Scale Score of the Family of Origin Instrument in Predicting Psychological Distress for the Untested Group

| $R^2$full | $R^2$rest | df | F | $f^2$ | p | alpha | alpha' |
|---|---|---|---|---|---|---|---|
| 0.0077 | 0.0000 | 1,45 | 0.339 | 0.008 | 0.563 | 0.05 | 0.025 |

| VARIABLE | DF | PARAMETER ESTIMATE | T FOR HO PARAMETER=0 | PROB>:t: |
|---|---|---|---|---|
| INTERCEPT | 1 | 0.1252 | 0.205 | 0.8382 |
| FAMTOT2 | 1 | 0.0044 | 0.582 | 0.5632 |

Note:

FAMTOT2 = Family of Origin Total Scale Score

Table 35

Unique Variance Accounted for by the Interaction Between Autonomy and Intimacy Subacales of the Family of Origin Instrument in Predicting Psychological Distress for the Tested Negative Group

| $R^2$full | $R^2$rest | df | F | $f^2$ | p | alpha | alpha' |
|---|---|---|---|---|---|---|---|
| 0.0617 | 0.0556 | 1,29 | 0.189 | 0.007 | 0.666 | 0.05 | 0.025 |

| VARIABLE | DF | PARAMETER ESTIMATE | T FOR HO PARAMETER=0 | PROB>:t: |
|---|---|---|---|---|
| INTERCEPT | 1 | -2.6612 | -0.327 | 0.7457 |
| AUTO2 | 1 | 0.0979 | 0.517 | 0.6089 |
| INTM2 | 1 | 0.0688 | 0.334 | 0.7410 |
| AUTOINT | 1 | -0.0020 | -0.436 | 0.6662 |

Note:

AUTO2 = Family of Origin Autonomy Subscale
INTM2 = Family of Origin Intimacy Subscale
AUTOINT = Interaction Between Autonomy and Intimacy

Table 36

Unique Variance Accounted for by the Autonomy Subscale of the Family of Origin Instrument in Predicting Psychological Distress for the Tested Negative Group

| $R^2$full | $R^2$rest | df | F | $f^2$ | p | alpha | alpha' |
|---|---|---|---|---|---|---|---|
| 0.0556 | 0.0349 | 1,30 | 0.658 | 0.02 | 0.424 | 0.05 | 0.025 |

| VARIABLE | DF | PARAMETER ESTIMATE | T FOR HO PARAMETER=0 | PROB>:t: |
|---|---|---|---|---|
| INTERCEPT | 1 | 0.8505 | 0.816 | 0.4208 |
| AUTO2 | 1 | 0.0158 | 0.811 | 0.4237 |
| INTM2 | 1 | -0.0207 | -1.136 | 0.2649 |

Note:

AUTO2 = Family of Origin Autonomy Subscale
INTM2 = Family of Origin Intimacy Subscale

Table 37

Variance Accounted for by the Total Scale Score of the Family of Origin Instrument in Predicting Psychological Distress for the Tested Negative Group

| $R^2$full | $R^2$rest | df | F | $f^2$ | p | alpha | alpha' |
|---|---|---|---|---|---|---|---|
| 0.0026 | 0.0000 | 1,32 | 0.080 | 0.003 | 0.779 | 0.05 | 0.025 |

| VARIABLE | DF | PARAMETER ESTIMATE | T FOR HO PARAMETER=0 | PROB>:t: |
|---|---|---|---|---|
| INTERCEPT | 1 | 0.9697 | 0.924 | 0.3626 |
| FAMTOT2 | 1 | -0.0035 | -0.282 | 0.7798 |

Note:

FAMTOT2 = Family of Origin Total Scale Score